

FIG 1

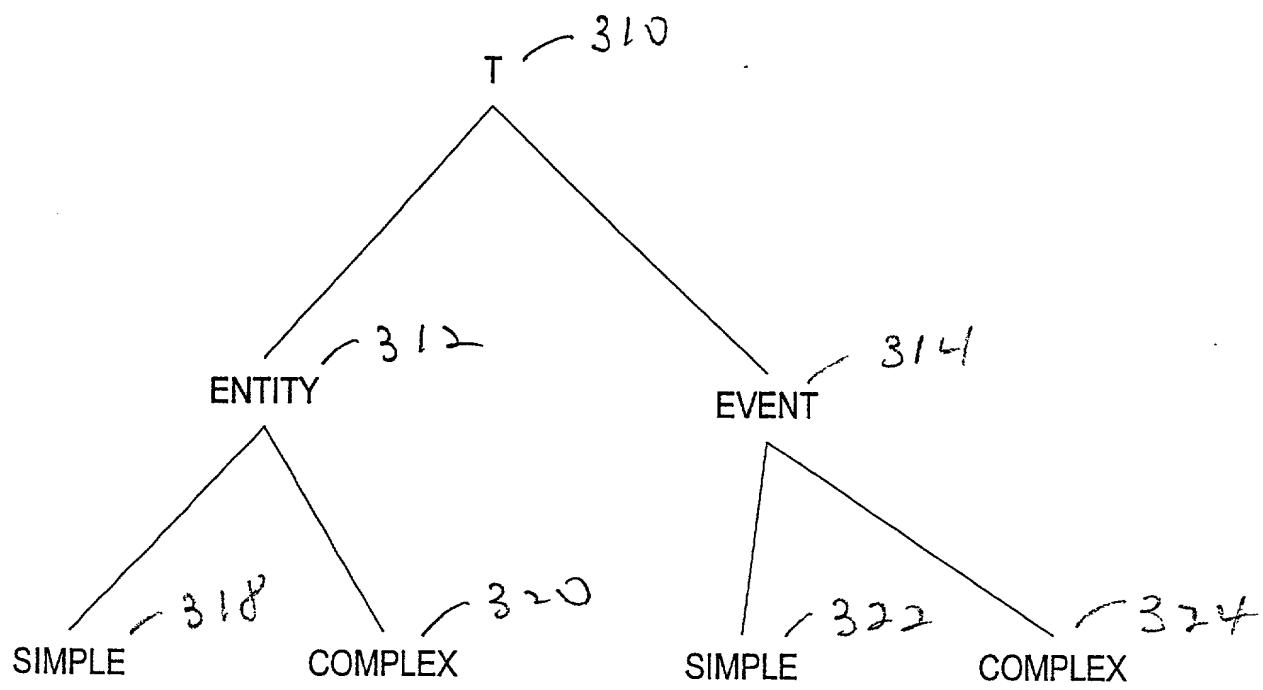
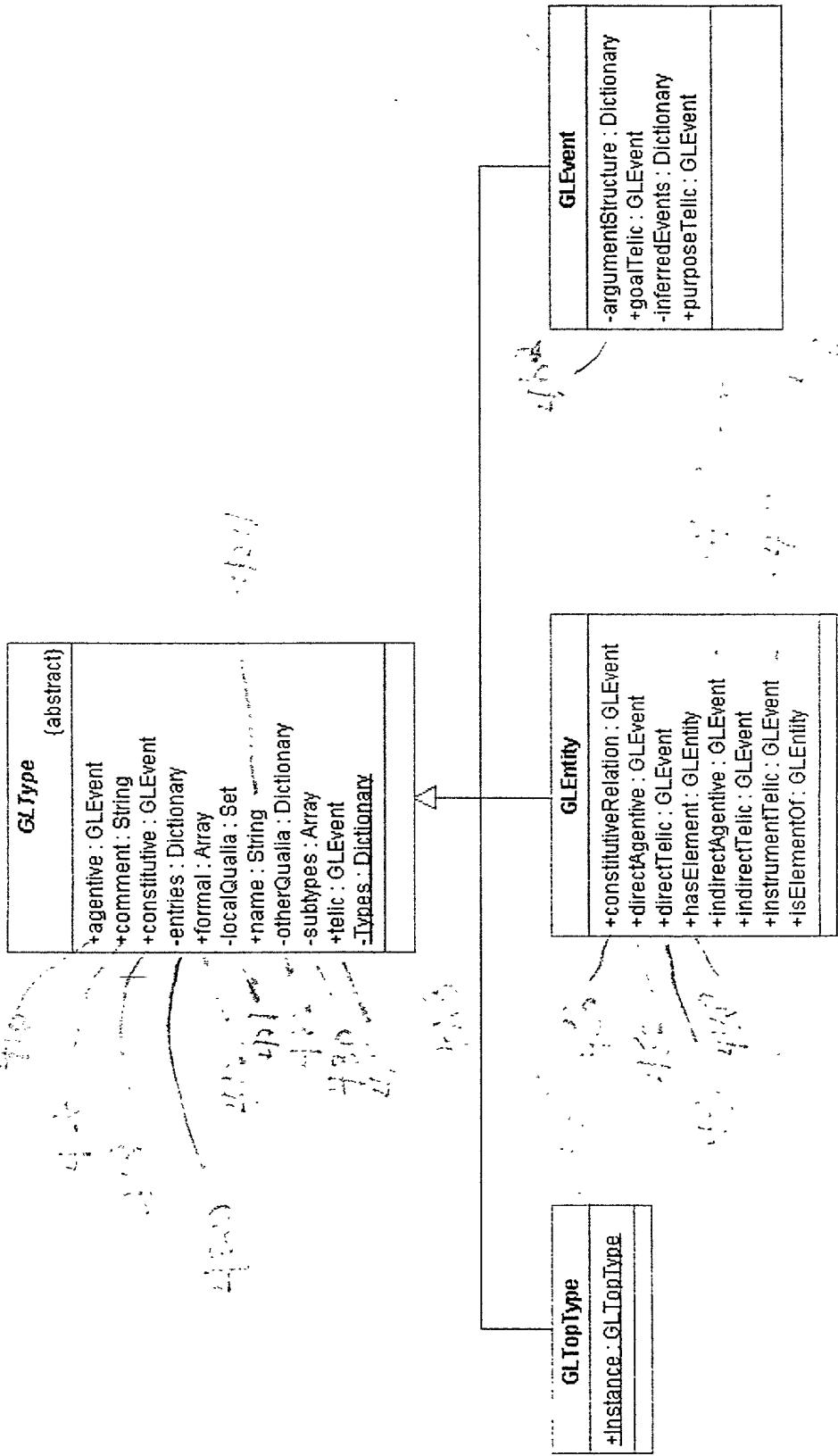


Fig. 2



510a

526

TooType * Entity — 524

Group * Immaterial Entity — 522

Individuated Entity — 512

Area * Celestial Body — 520

Individuated Functional Entity

Individuated Instrumental Entity

Communication Medium — 516

Financial Instrument — 514

Mutual Fund

Payment Instrument

Individuated Tool Entity PartOf

Representational Artifact *

Social Entity *

Sound *

Source *

Virtual Object *

Visual Image *

Material Entity *

Mutual Fund
"a Complex GLEntity" — 550

formal: #([[Company]] [[Financial Instrument]])

indirectAgentive: [[Found Activity]]

directTelic: [[Business Activity]]

*instrumentTelic: [[Invest Activity]]

genre: [[Genre]]

location: [[Locative Relation]]

mutual fund - 2
"a CollocationalNounEntry"

type: [[Mutual Fund]]

name: mutual fund — 540

Create Ect. X-G Mat Copy Rename Delete Y-Multiple Del Find Change Type Change Types

— 1 3 4

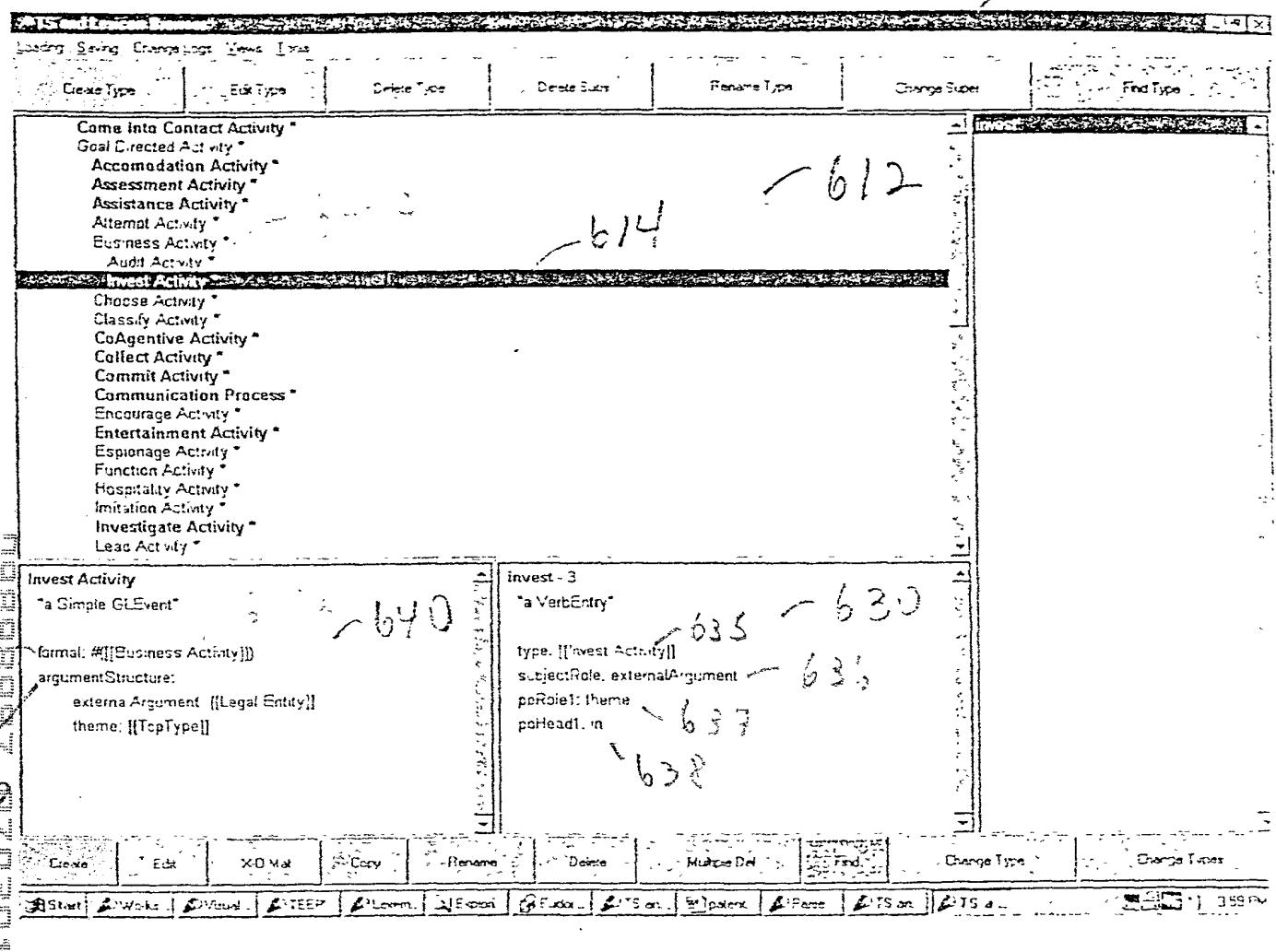


Fig. 5

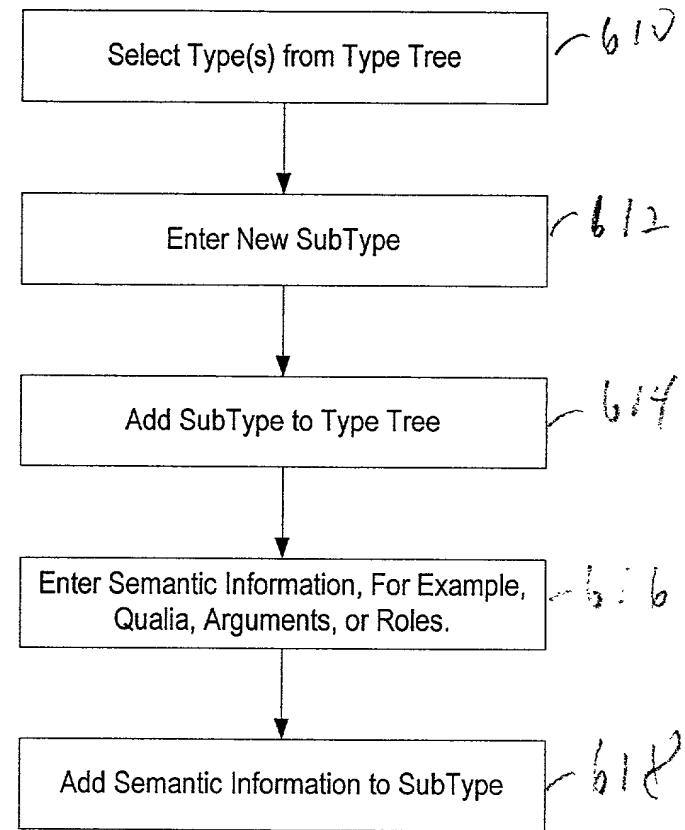


FIG. 6A

6 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0

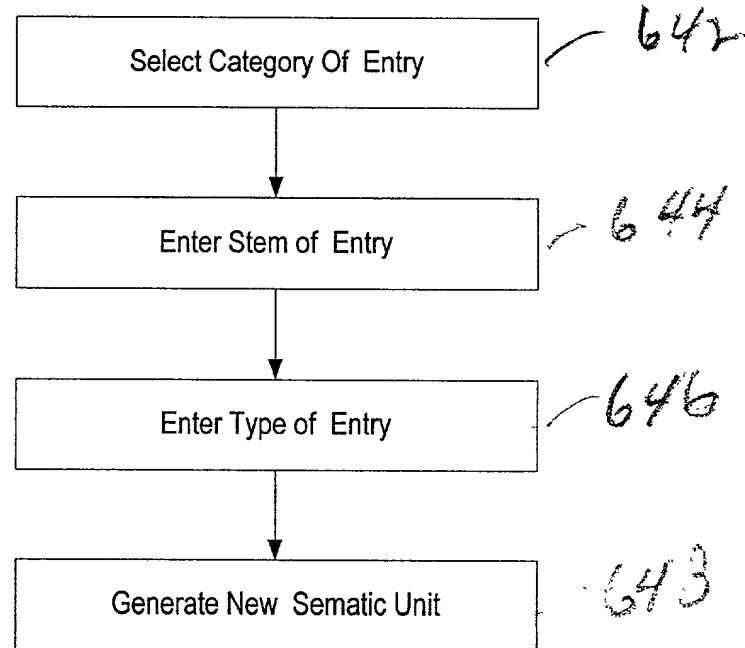


FIG. 6B

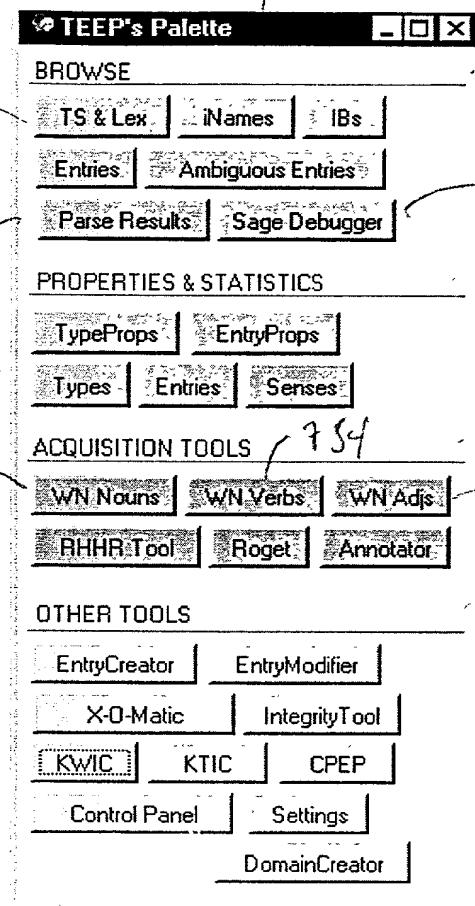
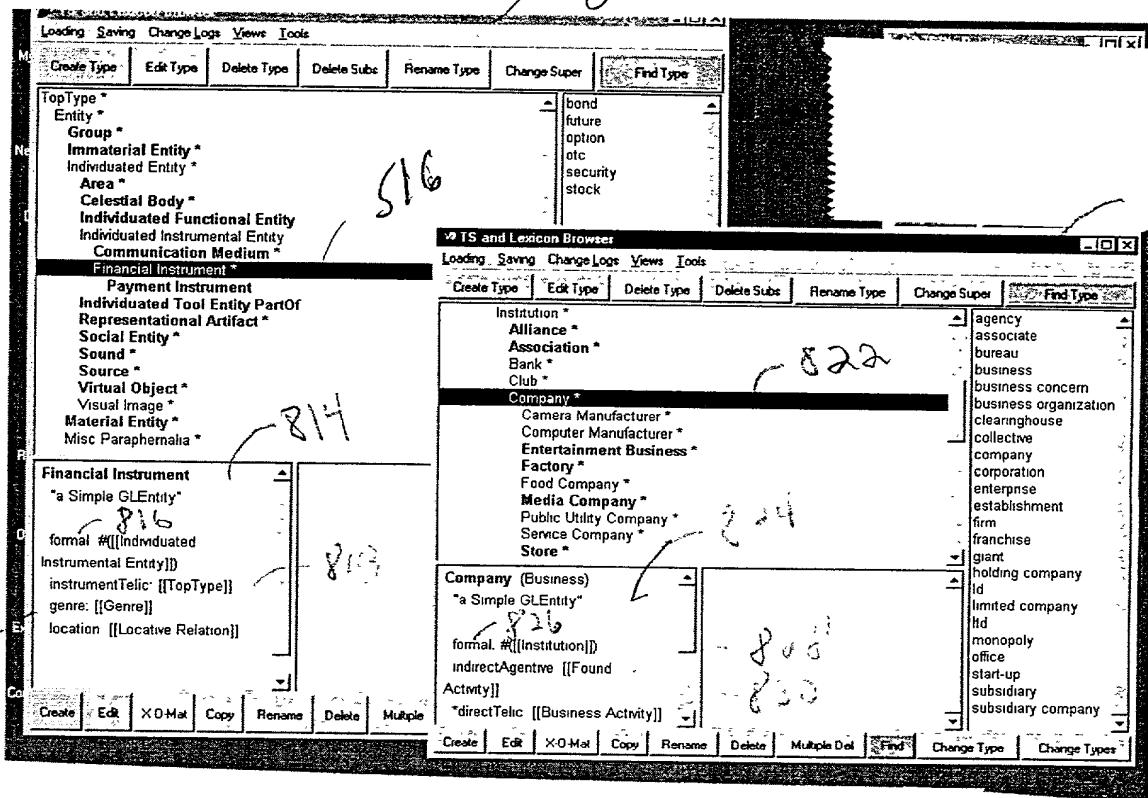


Fig. 7



F 19 J

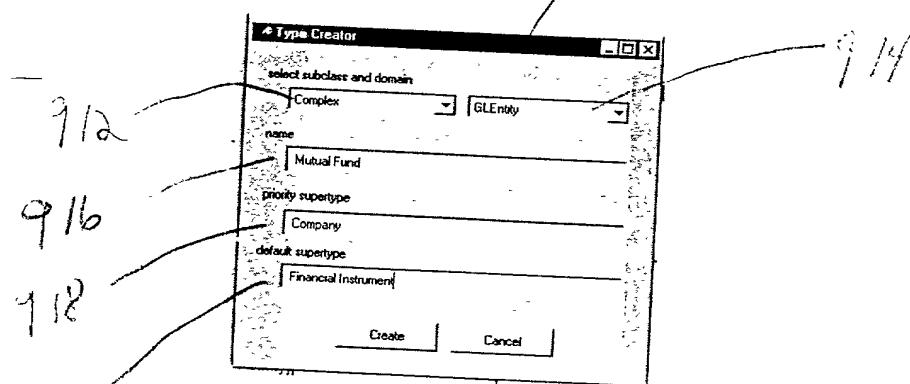


Fig. 1

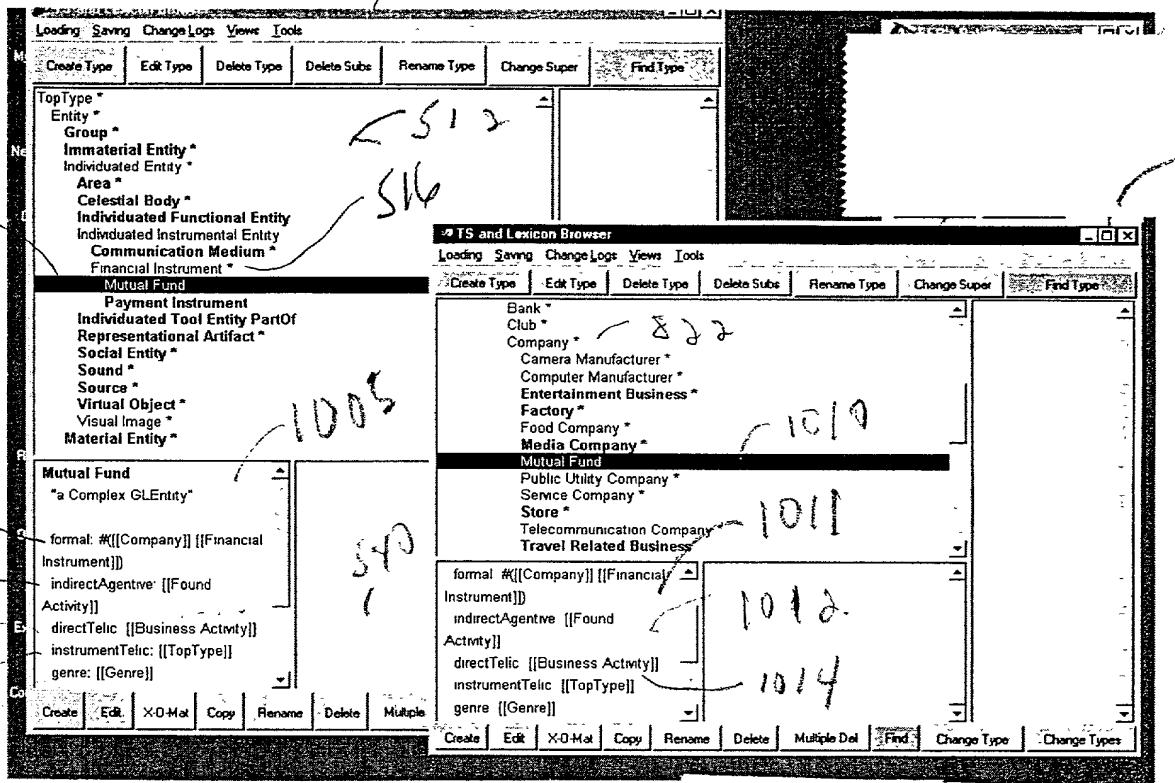
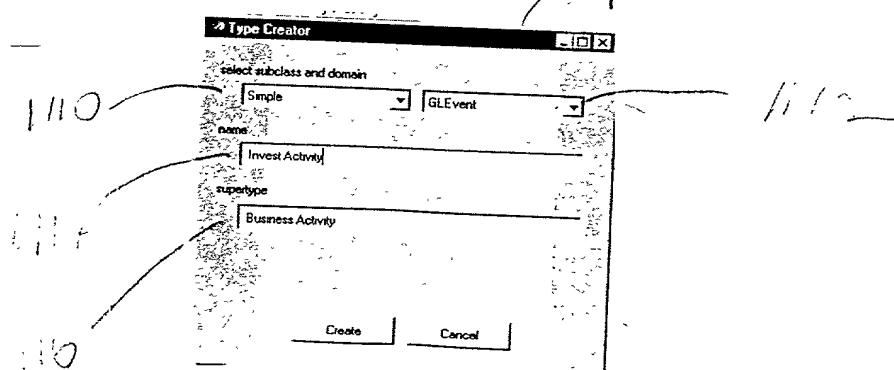
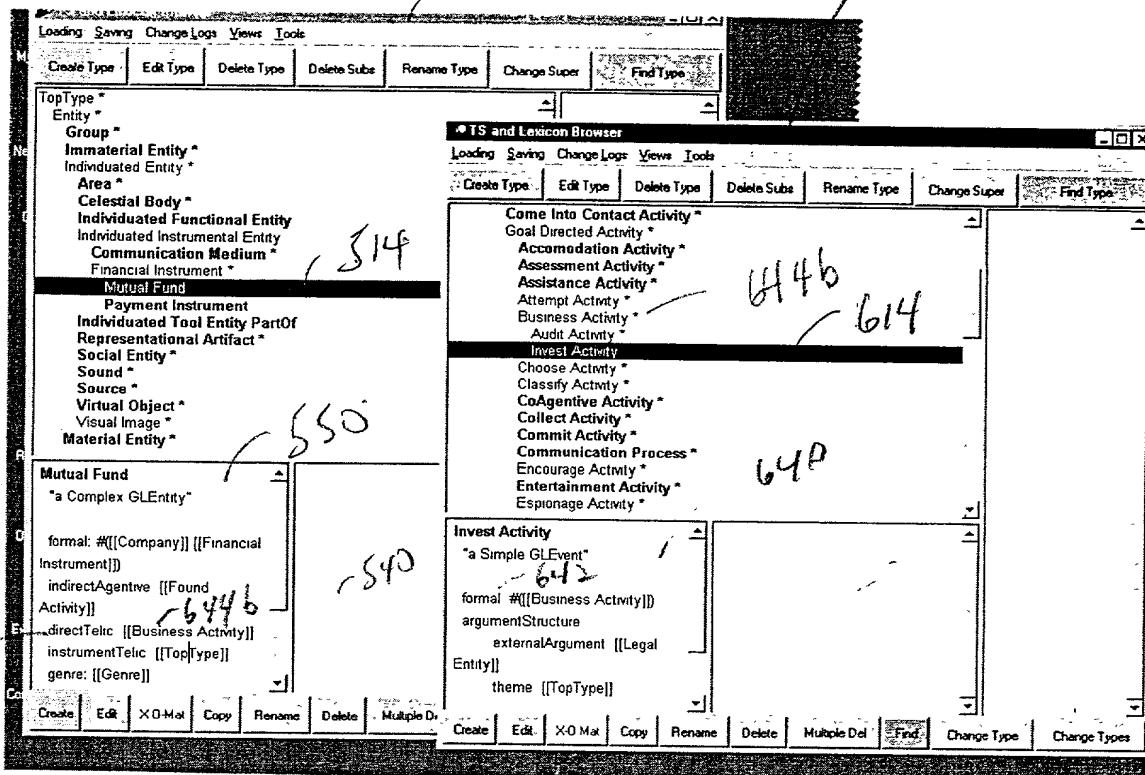


Fig 10





F 1 g . 12

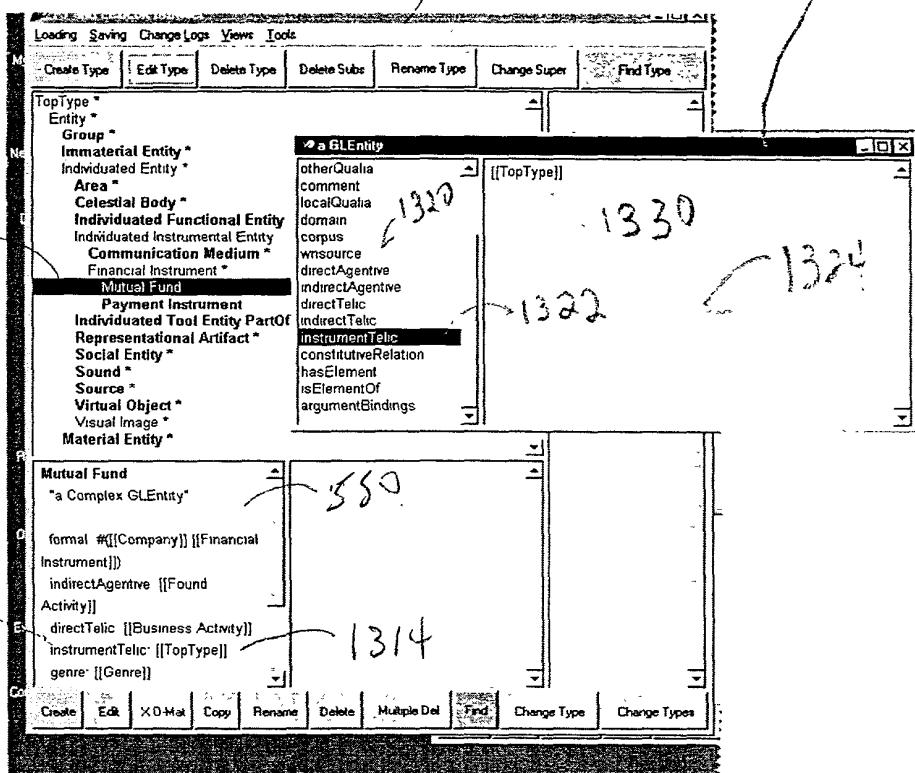


Fig 13

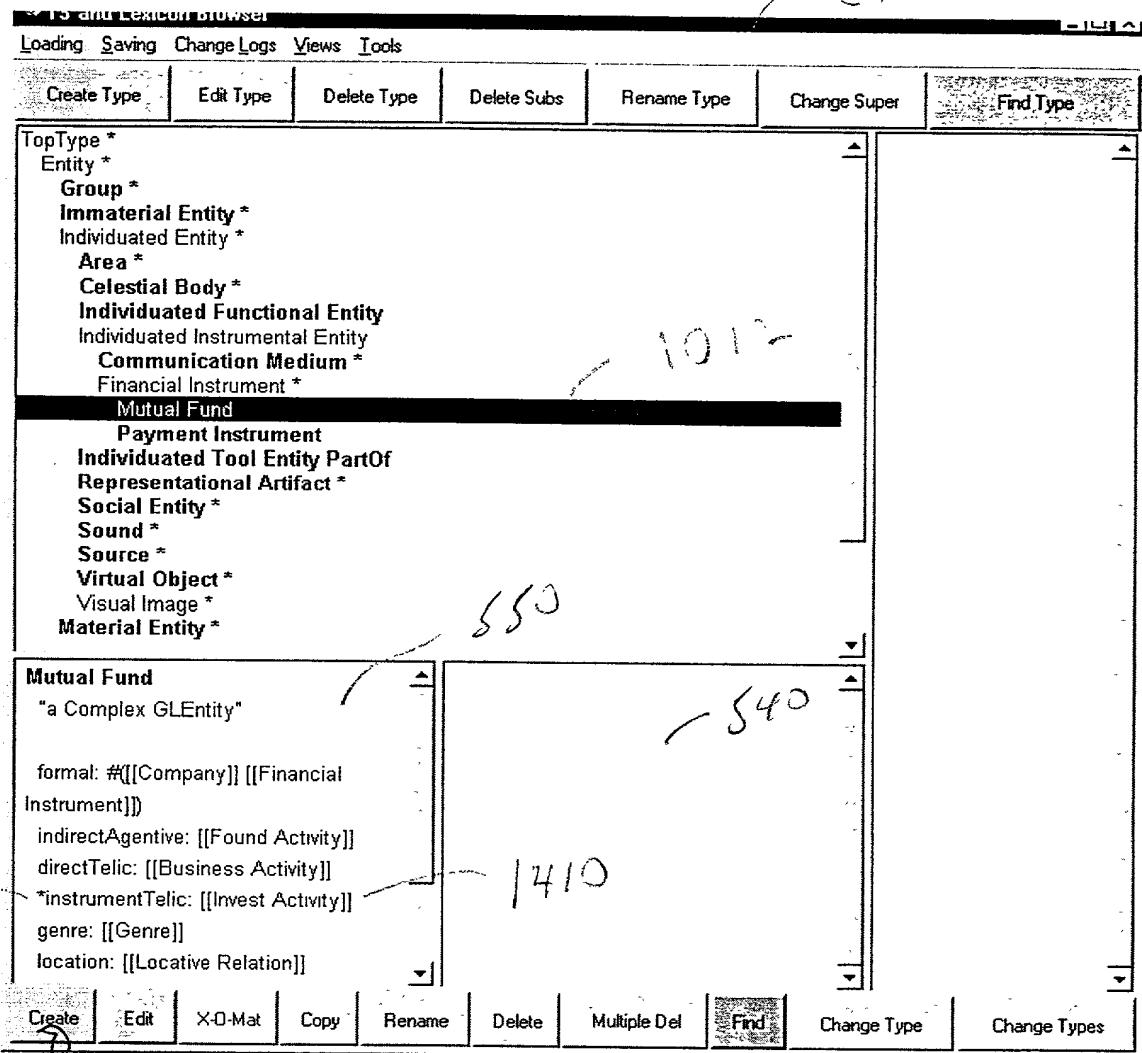
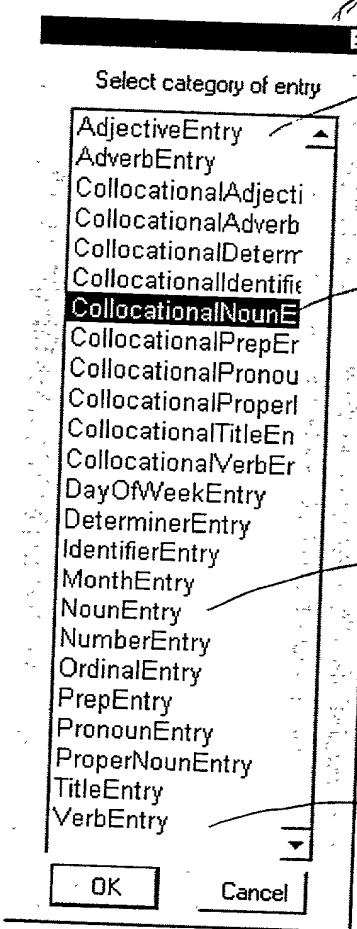


Fig 14



1510

1518

1512

1516

1514

Fig. 15

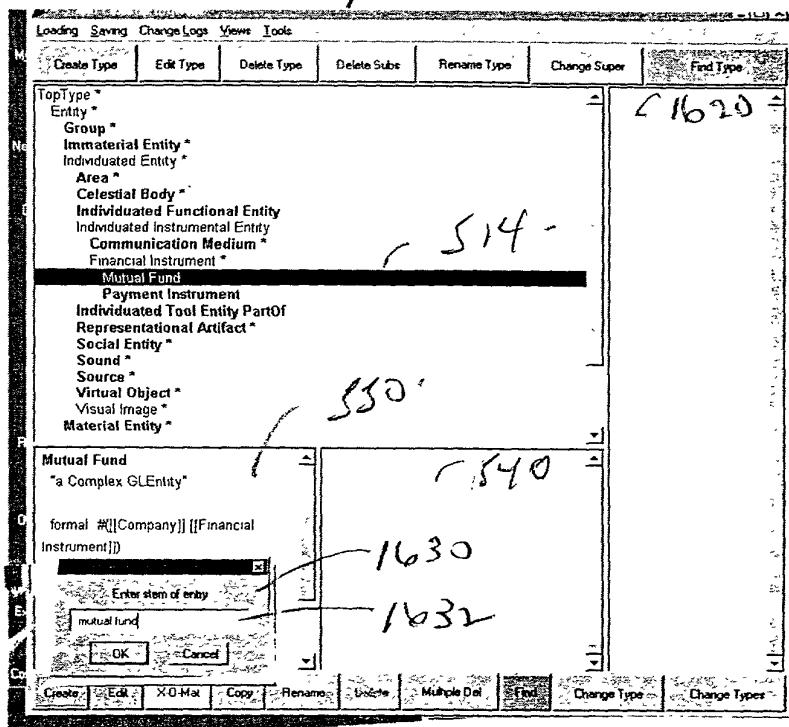


Fig 16

810a

TS and Lexicon Browser

Loading Saving Change Logs Views Tools

Create Type Edit Type Delete Type Delete Subs Rename Type Change Super Find Type

TopType * Entity * Group * Immaterial Entity * Individuated Entity * Area * Celestial Body * Individuated Functional Entity Individuated Instrumental Entity Communication Medium * Financial Instrument * Mutual Fund * Payment Instrument Individuated Tool Entity PartOf Representational Artifact * Social Entity * Sound * Source * Virtual Object * Visual Image * Material Entity *

Mutual Fund

"a Complex GLEntity"

formal: #([[Company]] [[Financial Instrument]])

indirectAgentive: [[Found Activity]]

directTelic: [[Business Activity]]

*instrumentTelic: [[Invest Activity]]

genre: [[Genre]]

location: [[Locative Relation]]

mutual fund - 2

"a CollocationalNounEntry"

type: [[Mutual Fund]] - 542

name: mutual fund

1310 1410 1510 1610 1710 1810 1910 2010 2110 2210 2310 2410 2510 2610 2710 2810 2910 3010 3110 3210 3310 3410 3510 3610 3710 3810 3910 4010 4110 4210 4310 4410 4510 4610 4710 4810 4910 5010 5110 5210 5310 5410 5510 5610 5710 5810 5910 6010 6110 6210 6310 6410 6510 6610 6710 6810 6910 7010 7110 7210 7310 7410 7510 7610 7710 7810 7910 8010 8110 8210 8310 8410 8510 8610 8710 8810 8910 9010 9110 9210 9310 9410 9510 9610 9710 9810 9910 10010

Create Edit X-O-Mat Copy Rename Delete Multiple Del Find Change Type Change Types

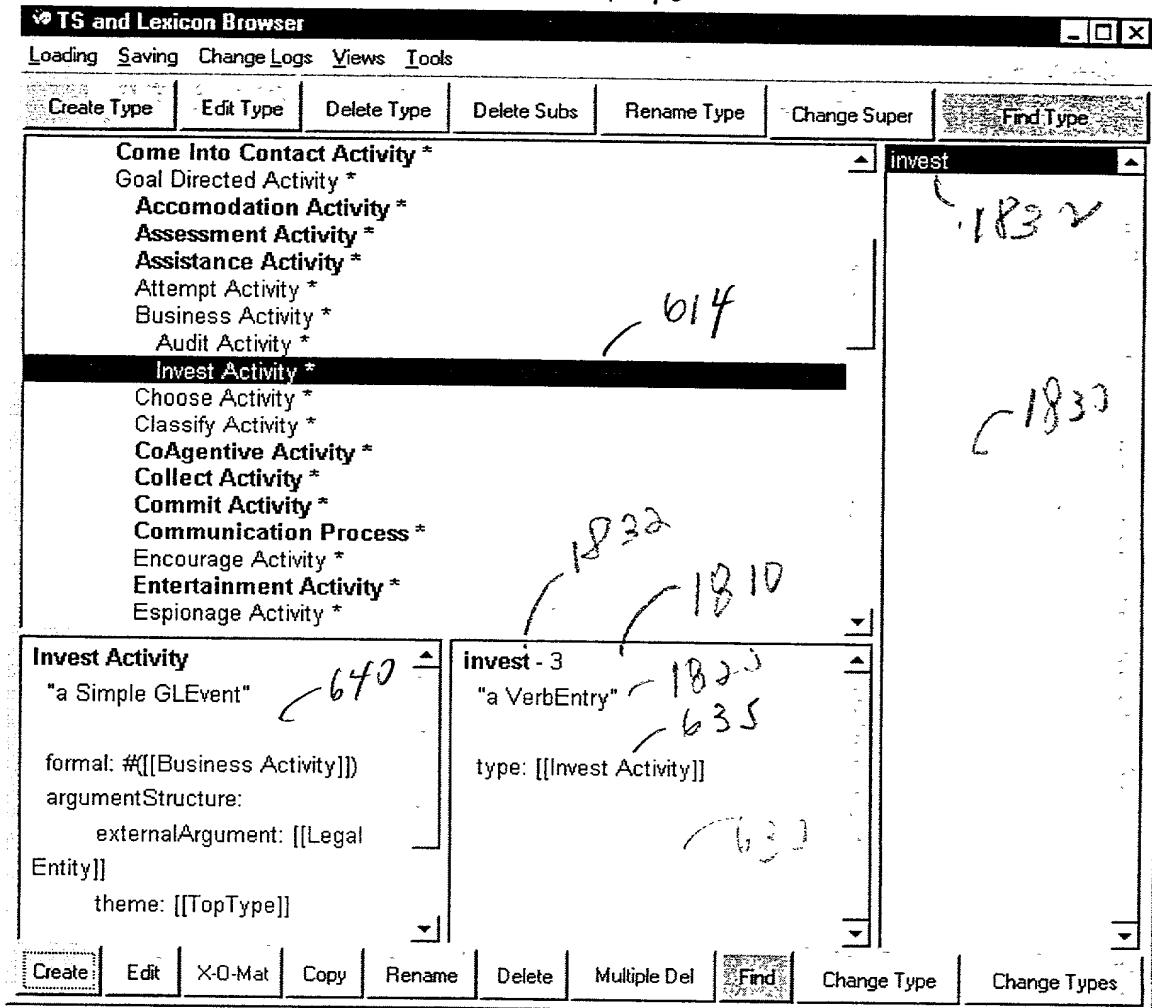


Fig 18

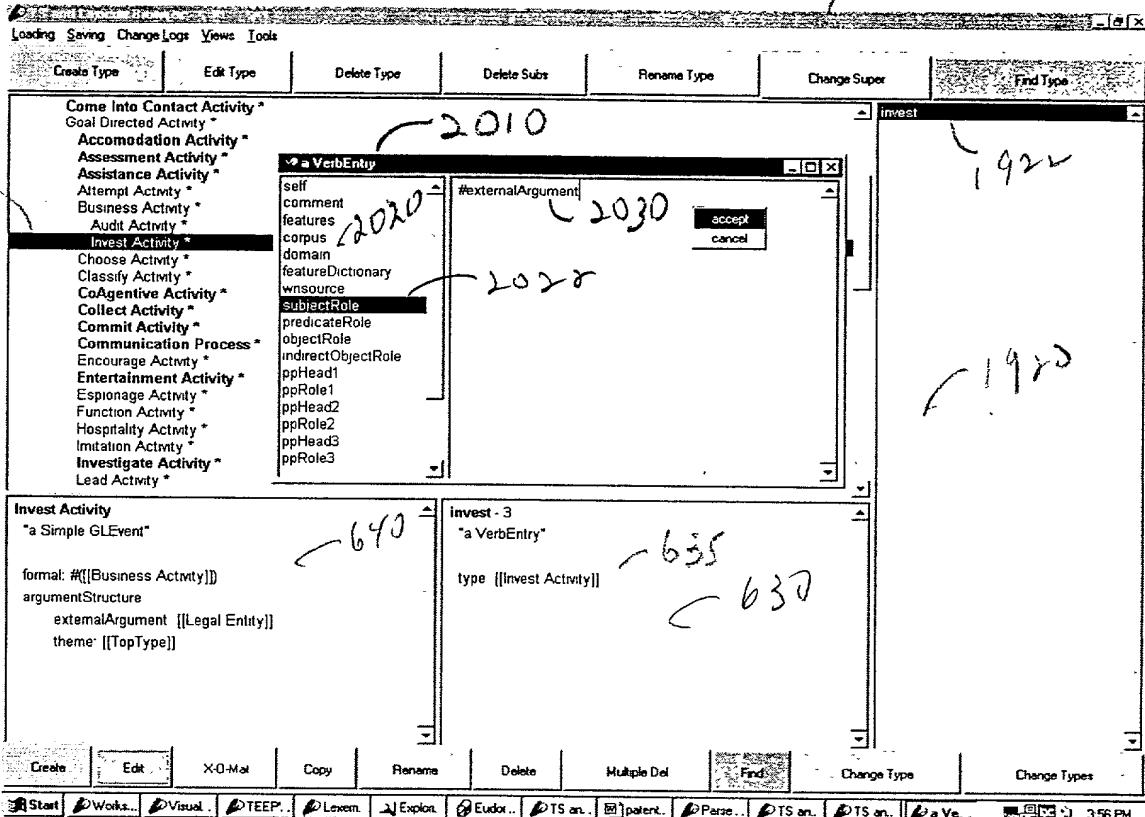


Fig.

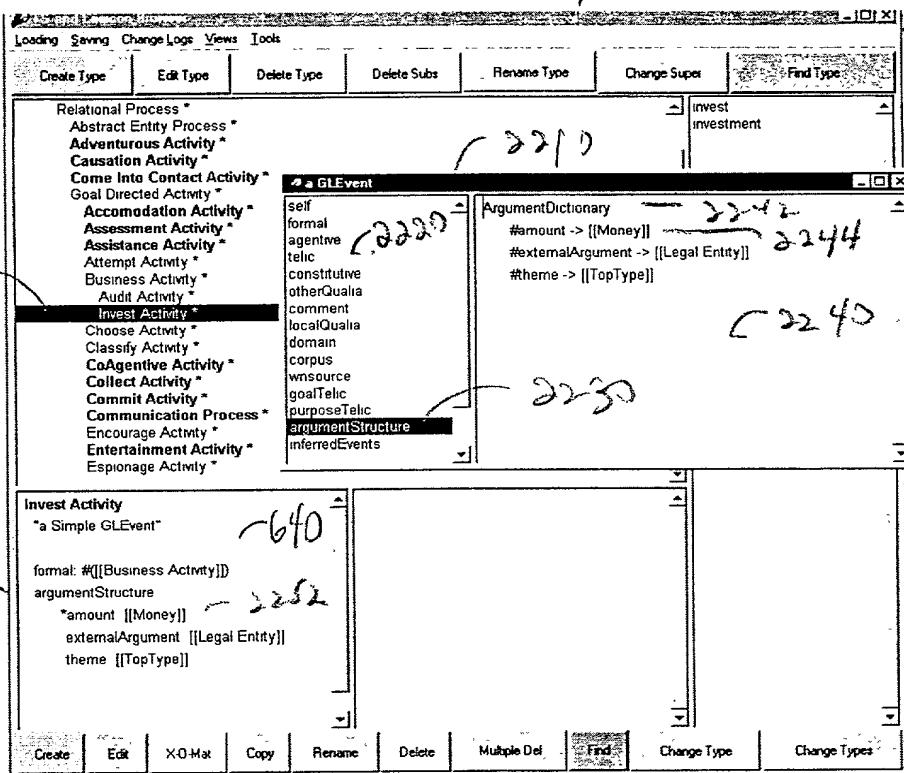


Fig 30

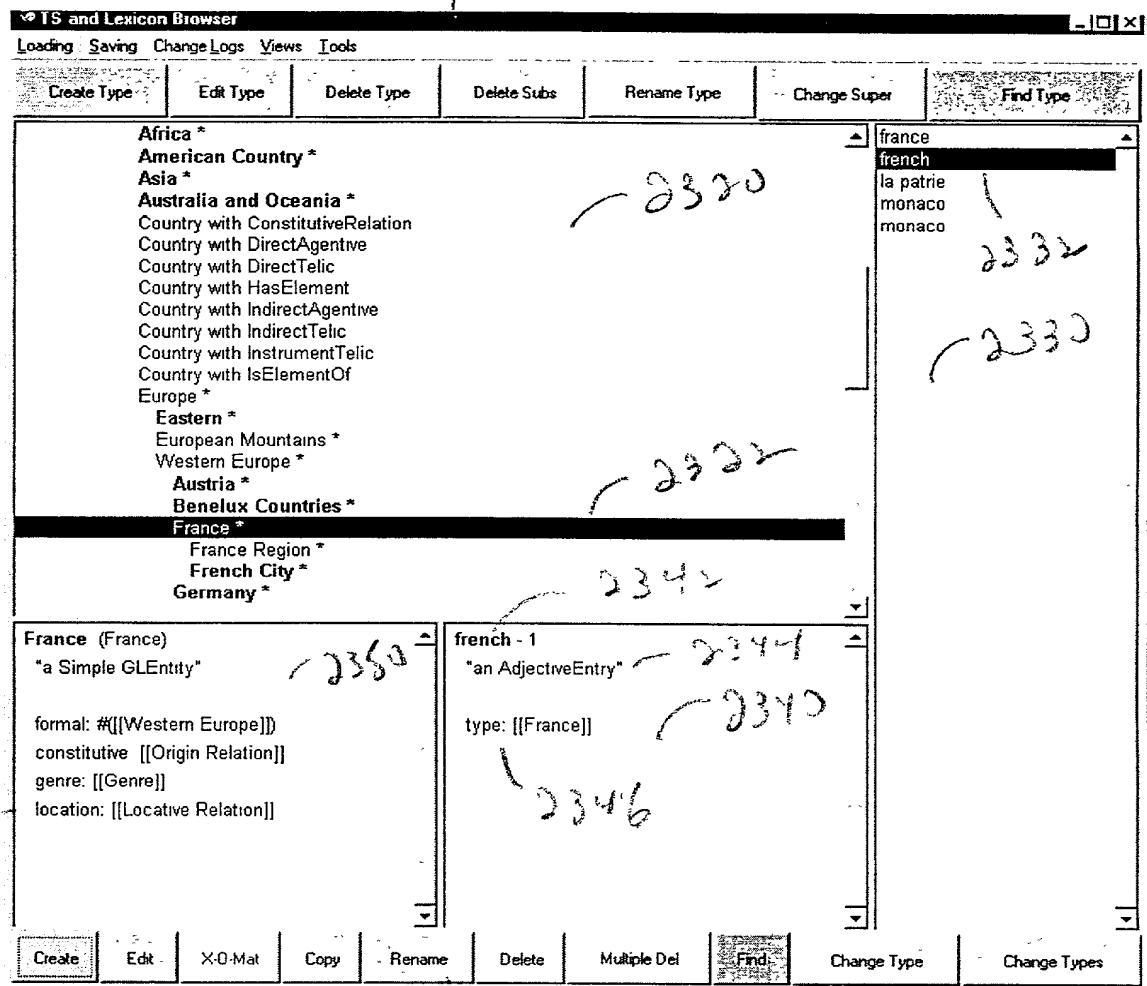


Fig 21

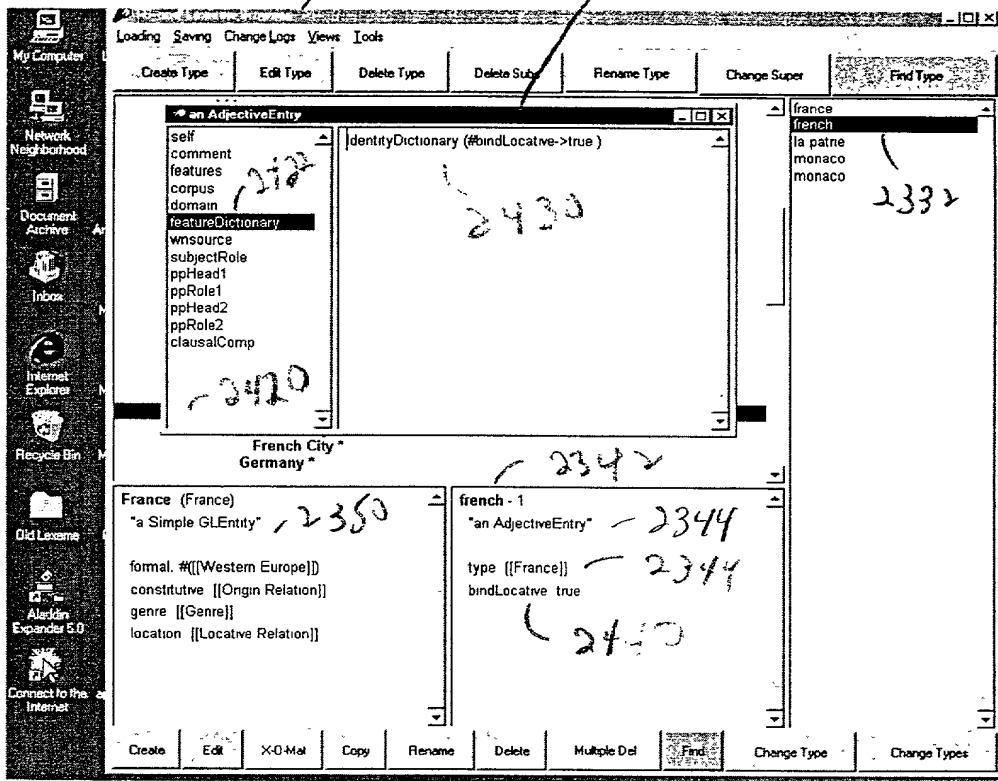
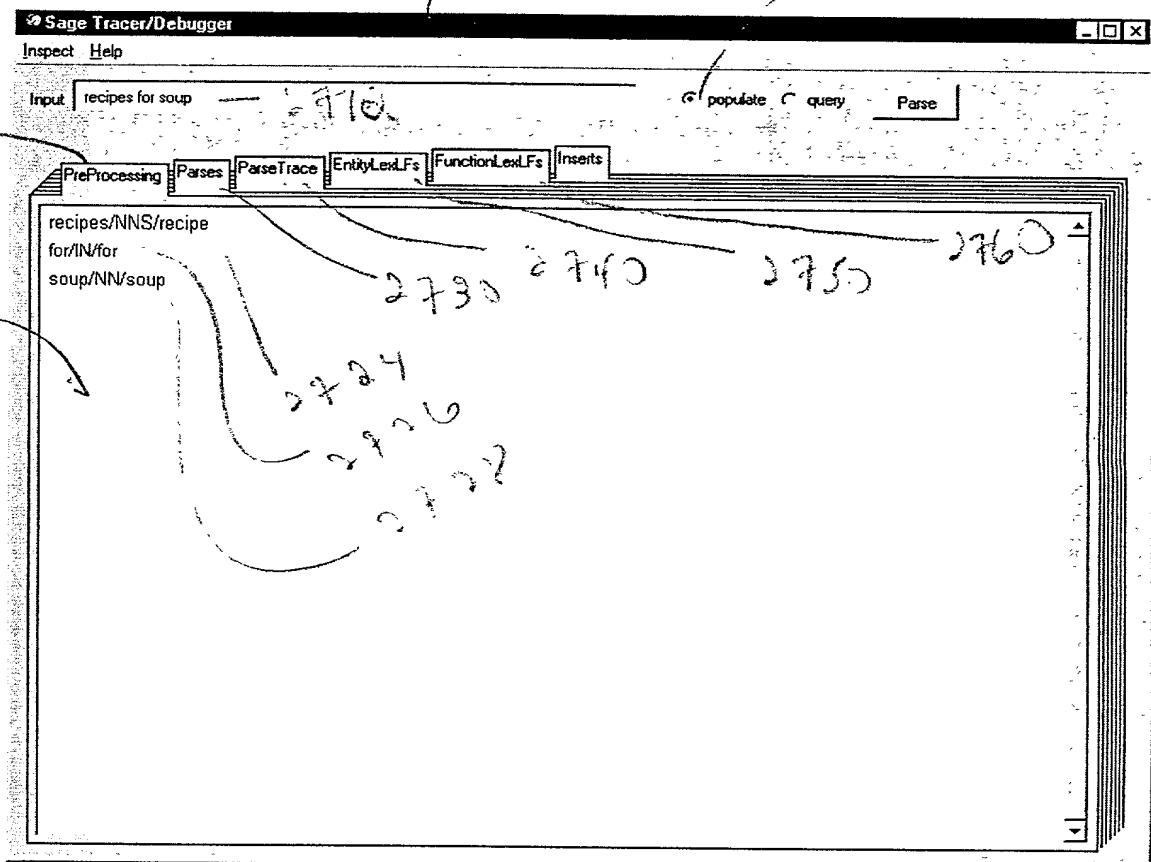
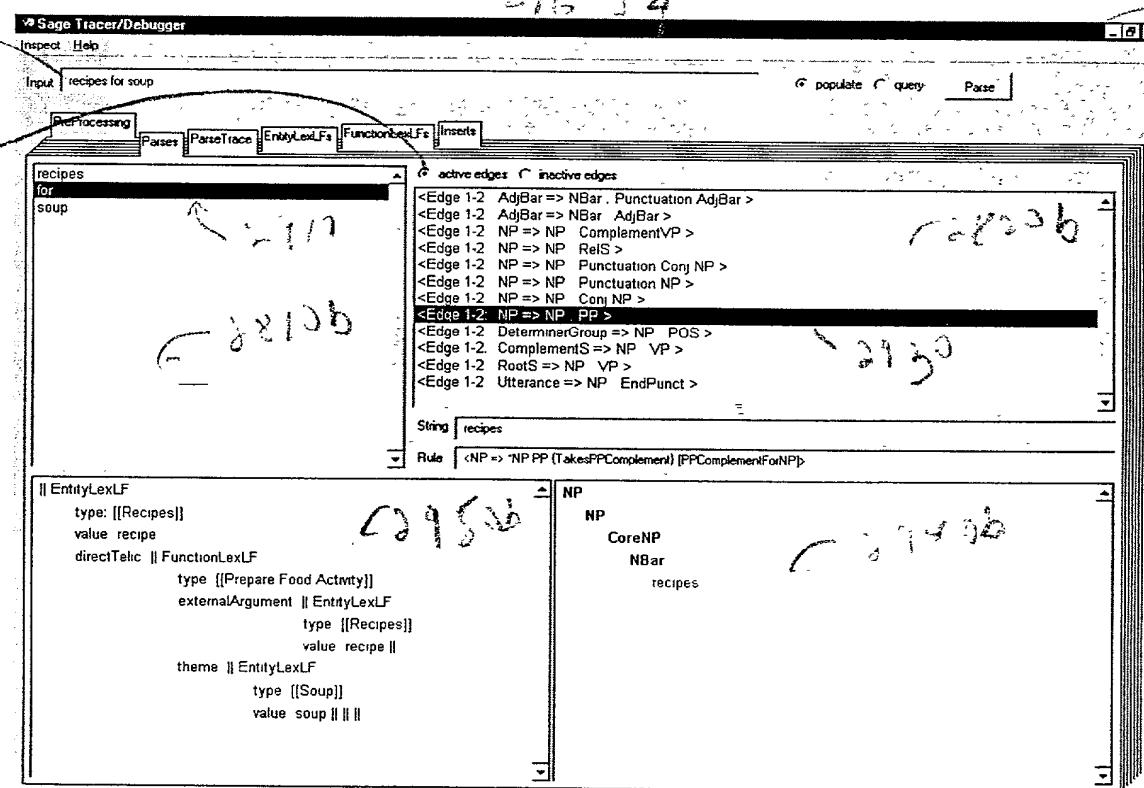
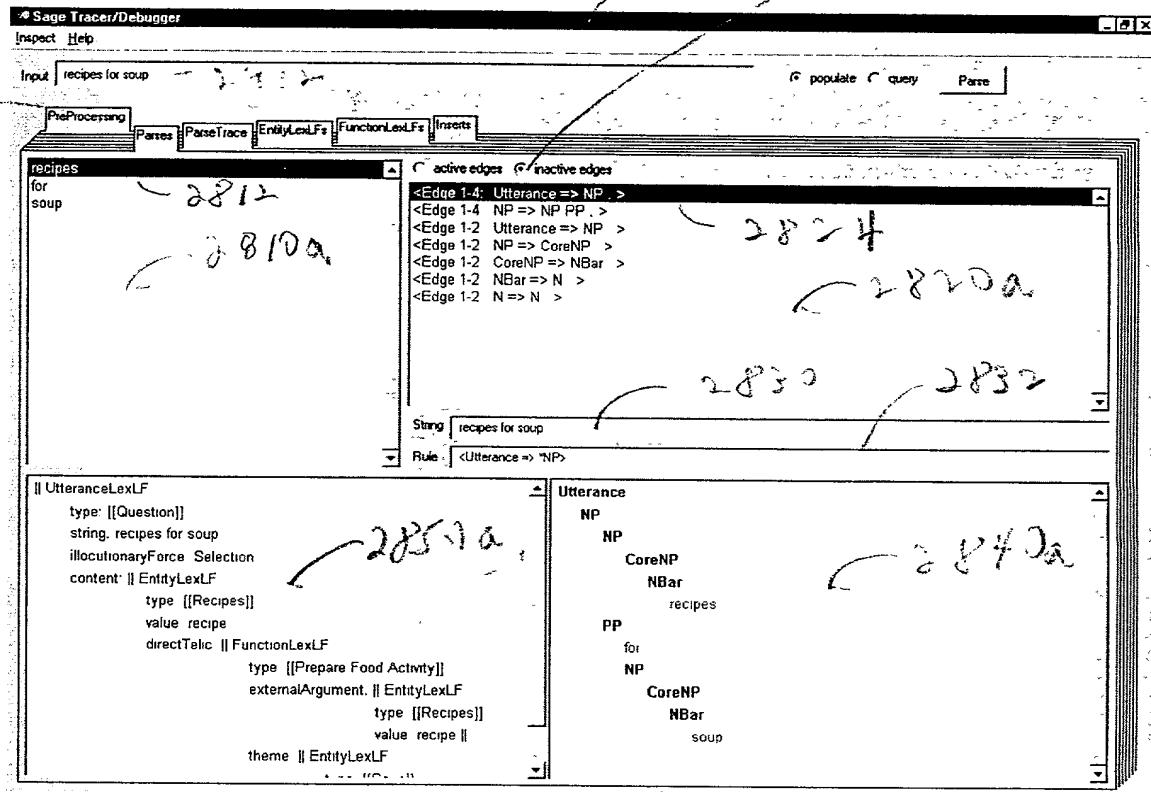


Fig. 27



11

8



2710 2822

2710 2810a 2824 2820a

2830 2832

2811 2810b 2823b 2930

2740b

2740

2710

3010

• Sage Tracer/Debugger

Input: recipes for soup

PreProcessing Parse ParseTrace EntityLexFts FunctionLexFts Inserts

populate query Parse

```

Adding inactive edge: <Edge 1-2: N => N >
Adding inactive edge: <Edge 1-2: NBar => N >
Adding inactive edge: <Edge 1-2: CoreNP => NBar >
Adding inactive edge: <Edge 1-2: NP => CoreNP >
Adding inactive edge: <Edge 1-2: Utterance => NP >
Adding active edge: <Edge 1-2: Utterance => NP_EndPunct >
Adding active edge: <Edge 1-2: RootS => NP_VP >
Adding active edge: <Edge 1-2: ComplementS => NP_VP >
Adding active edge: <Edge 1-2: DeterminerGroup => NP_POS >
Adding active edge: <Edge 1-2: NP => NP_PP >
Adding active edge: <Edge 1-2: NP => NP_ConjNP >
Adding active edge: <Edge 1-2: NP => NP_PunctuationNP >
Adding active edge: <Edge 1-2: NP => NP_ConjNP >
Adding active edge: <Edge 1-2: NP => NP_RelS >
Adding active edge: <Edge 1-2: NP => NP_ComplementVP >
Adding active edge: <Edge 1-2: AdjBar => NBar_AdjBar >
Adding active edge: <Edge 1-2: AdjBar => NBar_PunctuationAdjBar >
Adding inactive edge: <Edge 2-3: Prep => Prep . >
Adding active edge: <Edge 2-3: PP => Prep_NP >
Adding active edge: <Edge 2-3: AdvP => Prep_DayOfWeek >
Adding inactive edge: <Edge 3-4: N => N >
Adding inactive edge: <Edge 3-4: NBar => N >
Adding inactive edge: <Edge 3-4: CoreNP => NBar >
Adding inactive edge: <Edge 3-4: NP => CoreNP >
Adding active edge: <Edge 3-4: ComplementS => NP_VP >
Adding active edge: <Edge 3-4: DeterminerGroup => NP_POS >
Adding active edge: <Edge 3-4: NP => NP_PP >
Adding active edge: <Edge 3-4: NP => NP_ConjNP >

```

Fig 26 a

2710

• Sage Tracer/Debugger

Inspect Help

Input: recipes for soup

PreProcessing Parses

ParseTrace EntityLex.Fs FunctionLex.Fs Inserts

populate query Parse

```

Adding inactive edge. <Edge 3-4. NP => CoreNP >
Adding active edge. <Edge 3-4. ComplementS => NP VP >
Adding active edge. <Edge 3-4. DeterminerGroup => NP POS >
Adding active edge. <Edge 3-4. NP => NP PP >
Adding active edge. <Edge 3-4. NP => NP Conj NP >
Adding active edge. <Edge 3-4. NP => NP Punctuation NP >
Adding active edge. <Edge 3-4. NP => NP Punctuation Conj NP >
Adding active edge. <Edge 3-4. NP => NP RelS >
Adding active edge. <Edge 3-4. NP => NP ComplementVP >
Matching <Edge 2-3. PP => Prep NP > with <Edge 3-4. NP => CoreNP >
Adding inactive edge. <Edge 2-4. PP => Prep NP >
Matching <Edge 1-2. NP => NP PP > with <Edge 2-4. PP => Prep NP >
Adding inactive edge. <Edge 1-4. NP => NP PP >
Adding inactive edge. <Edge 1-4. Utterance => NP >
Adding active edge. <Edge 1-4. Utterance => NP EndPunct >
Adding active edge. <Edge 1-4. RootS => NP VP >
Adding active edge. <Edge 1-4. ComplementS => NP VP >
Adding active edge. <Edge 1-4. DeterminerGroup => NP POS >
Adding active edge. <Edge 1-4. NP => NP PP >
Adding active edge. <Edge 1-4. NP => NP Conj NP >
Adding active edge. <Edge 1-4. NP => NP Punctuation NP >
Adding active edge. <Edge 1-4. NP => NP Punctuation Conj NP >
Adding active edge. <Edge 1-4. NP => NP RelS >
Adding active edge. <Edge 1-4. NP => NP ComplementVP >
Adding active edge. <Edge 3-4. AdjBar => NBar AdjBar >
Adding active edge. <Edge 3-4. AdjBar => NBar Punctuation AdjBar >
Adding active edge. <Edge 3-4. NBar => N NBar >

```

3020

Fig 26 n

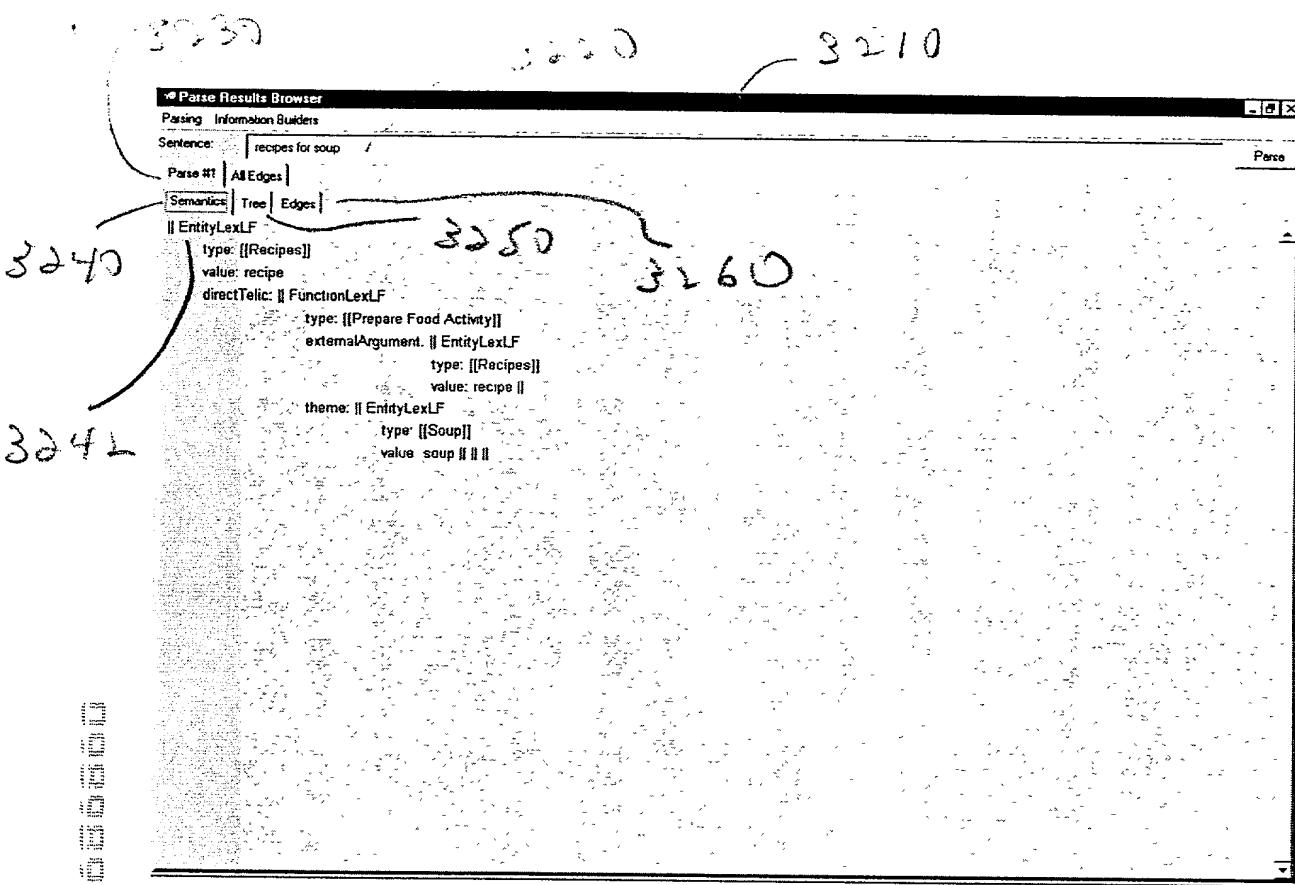


Fig 27

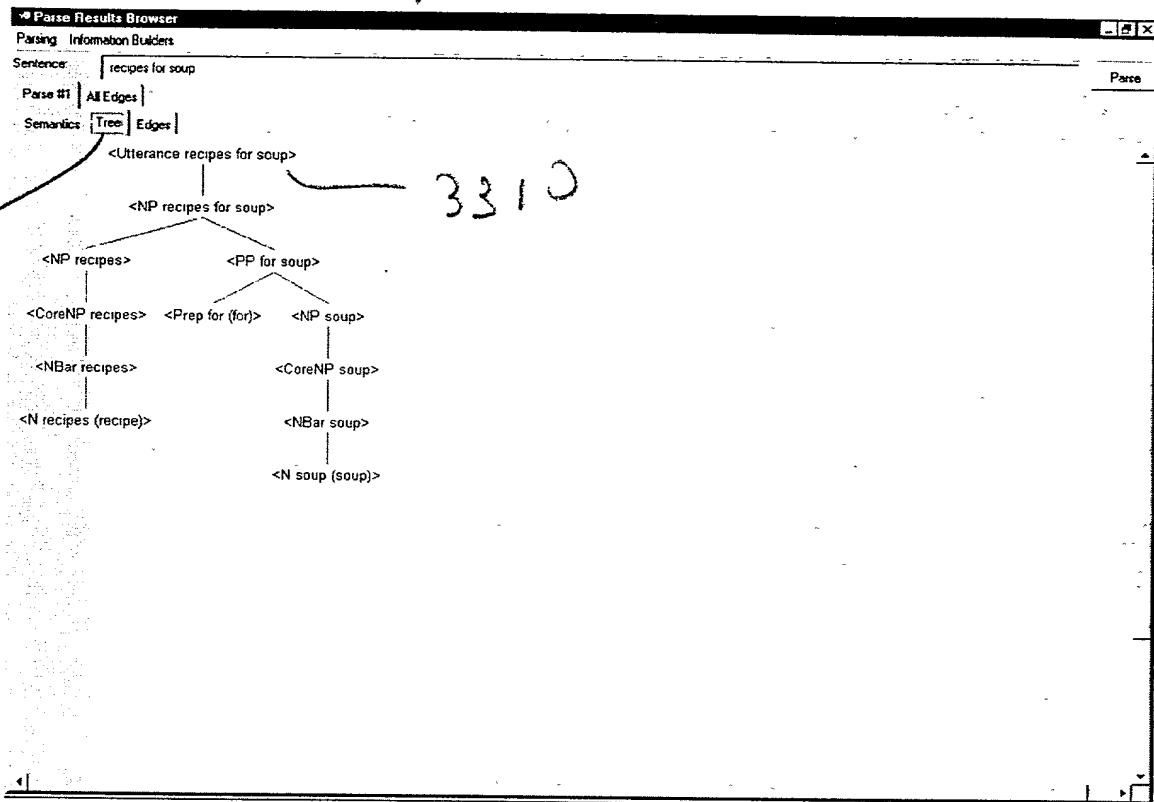


Fig 28

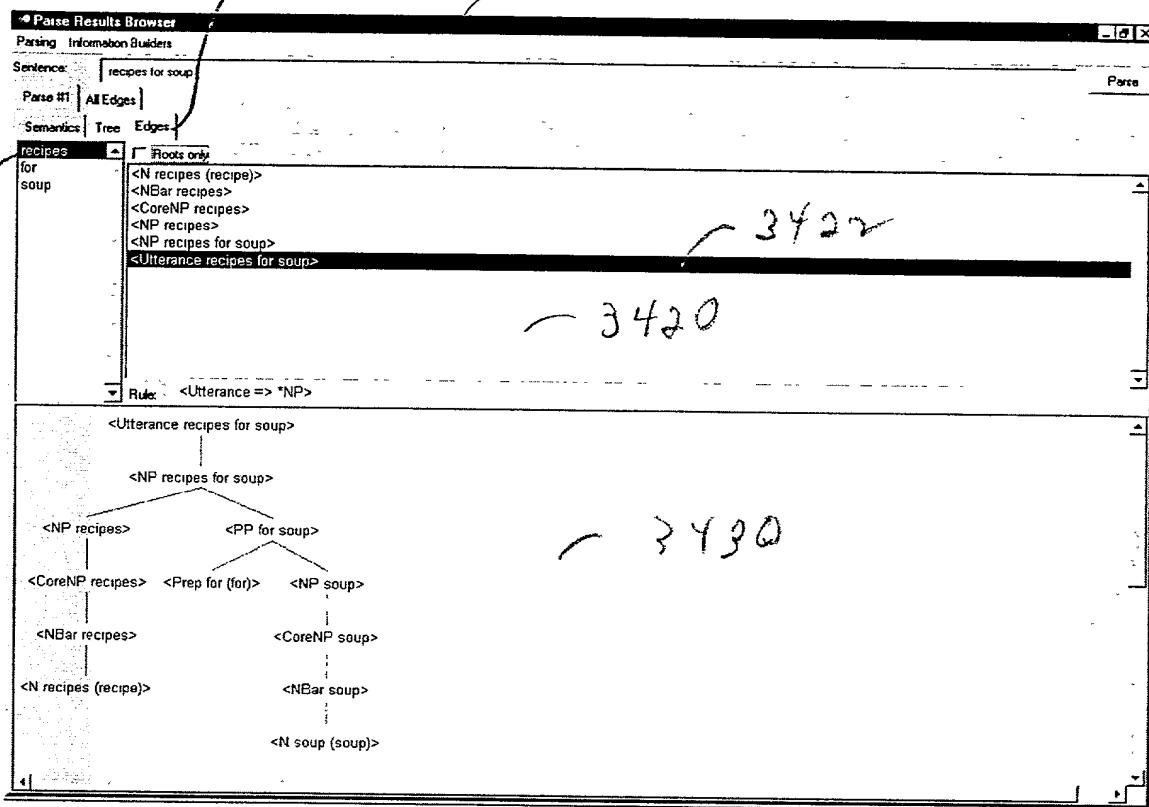


Fig 29

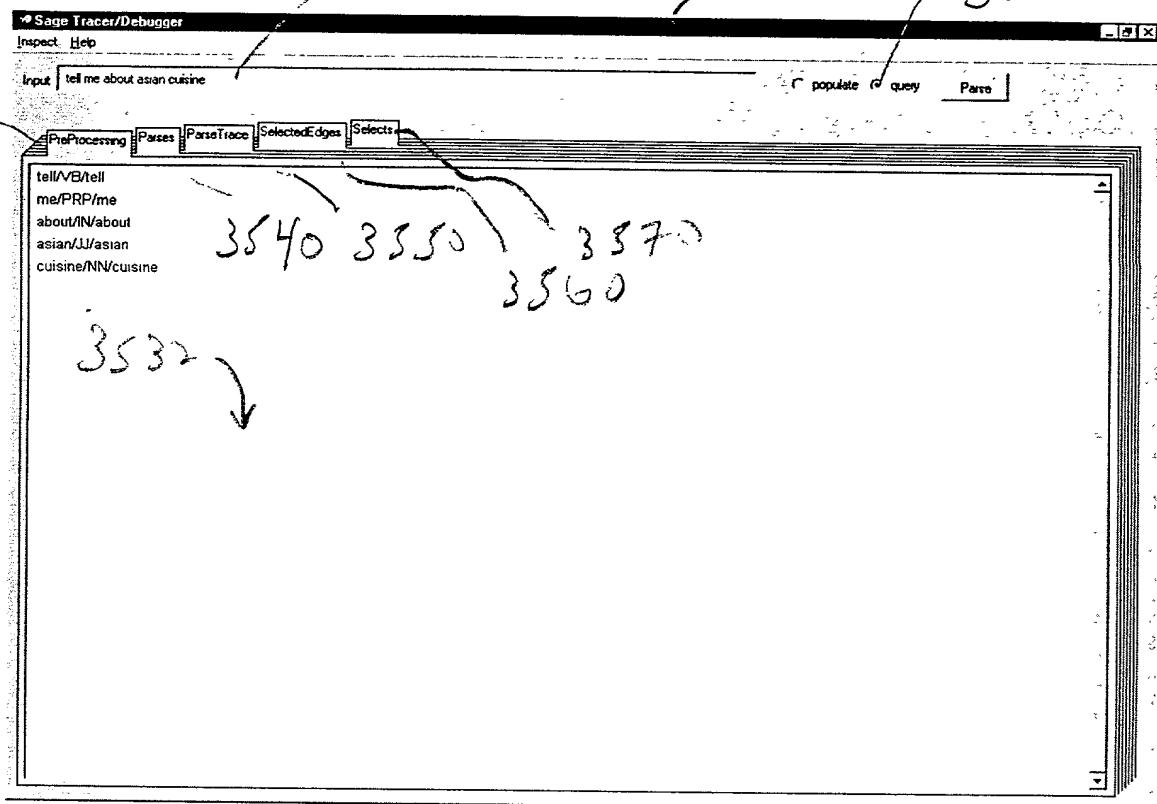


Fig 3D

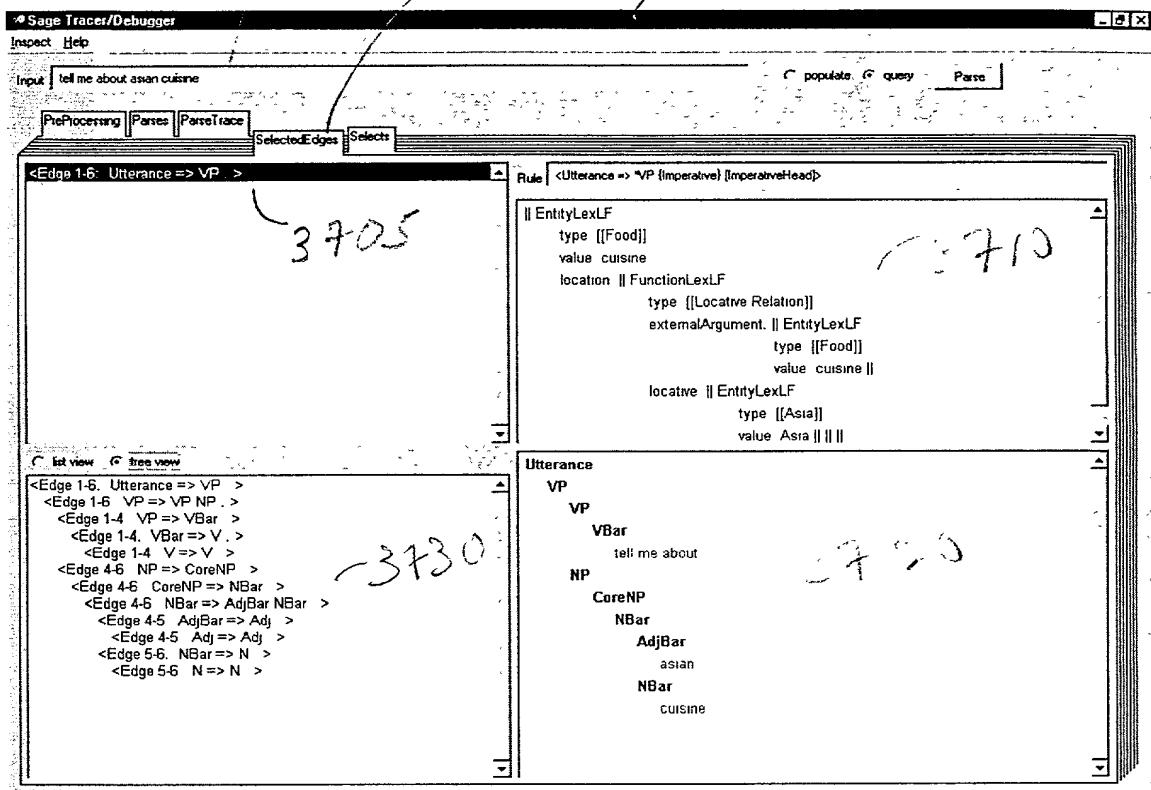


Fig 31